

Application Serial No. 10/642,936
Reply to office action of September 20, 2005

PATENT
Docket: CU-3332

Amendments To The Claims

The listing of claims presented below will replace all prior versions, and listings, of claims in the application.

Listing of claims:

1. (Currently Amended) A method of fabricating a semiconductor chip from a semiconductor wafer having a first surface supporting a semiconductor element and a second surface opposite the first surface, the method comprising the steps of:

forming a resist on one ore both of the first surface and the second surface, the resist including an aperture for exposing a cutting portion of the semiconductor wafer;

performing isotropic etching ~~at least partially~~ on a the exposed cutting portion ~~of the semiconductor wafer from one or both of the first surface and the second surface~~ via the aperture of the resist, thereby forming a groove having a bowl-shaped cross-section, the groove including an aperture having a width greater than the width of the aperture of the resist; and

performing anisotropic etching on a bottom surface of the groove via the aperture of the resist in such a way that a width of a resulting aperture on the bottom surface becomes smaller than the width of the aperture of the groove, thereby separating the semiconductor wafer into individual semiconductor elements.

2. (Original) The method as claimed in claim 1, further comprising the step of:
forming a resist on the first surface to expose the cutting portion on the first surface, when the cutting portion is isotropically etched from the first surface.

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3. (Original) The method as claimed in claim 2, wherein the resist has rounded-off corners.

4. (Original) The method as claimed in claim 1, further comprising the step of:
forming a resist on the second surface to expose the cutting portion on the second surface, when the cutting portion is isotropically etched from the second surface.

5. (Original) The method as claimed in claim 4, wherein the resist has rounded-off corners.

6-8. (Cancelled)

9. (Previously Presented) A method of fabricating a semiconductor chip from a semiconductor wafer having a first surface supporting a semiconductor element and a second surface opposite the first surface, the method comprising the steps of:

performing isotropic etching on a cutting portion of the semiconductor wafer from one of the first surface and the second surface, thereby forming a first groove having a bowl-shaped cross-section;

performing anisotropic etching on a bottom surface of the first groove, thereby forming a second groove; and

performing isotropic etching on a cutting portion of the semiconductor wafer from the other surface, thereby forming a third groove coupled to the second groove, the third groove having a bowl-shaped cross-section, and thereby separating the semiconductor wafer into individual semiconductor elements.